



Fig.3

Sequence Range: 1 to 669

Bases 1-669 of SEQ ID NO: 2

10	20	30	40	50	60
GATCTTCCGG GACATCTGAG GCGCCGAGG CGATCCGAGG CGCCCGAGGC GTCTGCGCGA					
70	80	90	100	110	120
AGGGCGCCGC CGTGCCGTCC ATCCCCGTCC GCGTCGACGC GGGCCGGGAG GGGGTGCGGC					
130	140	150	160	170	180
GGCGCCCTTC GGCTGTGTGG ACGAAGCGTC GGGTCGGAGG GGCGCCCGGA TATCGTCTTT					
190	200	210	220	230	240
GGGGCGGGGT GGCCGGAATT GCCGCCATGG TGTTGCCGGG GAATCGACCC GAAGACATGA					
250	260	270	280	290	300
TCACTTCTCG TATCCACCCG ATCACGTATC CGGGAGTCGA GAAGTGTTAC GCCGTGCCCC					
310	320	330	340	350	360
TGTCCGCGTC CTCACCCCTG TCGCCGTGAC AGCGACCCGC GTTCTTCCAC TCGCACGGAC					
370	380	390	400	410	420
GGCCCCACAG GACCTTTCGG CCCGGGCTCG CCCC GCCGCC TCGGTGACGG CCTCCGAATA					
430	440	450	460	470	480
ACGCGGCCGC CGGGGCTCG GCCGGTTGAC CGATCCGGGT CACGCGCCCC GCCGGGCGGG					
490	500	510	520	530	540
CGGCCACGTC CGGTCTCGCC CCGCCCGACA TCGGCTGCGA CTGCCTTCGC TCGCACTTCT					
550	560	570	580	590	600
TCCCGCCTCC CGGCCGCGTT TTTCCGCCGC CGAAGGTGCG GCGACGCGTA CCGAATCCCC					
610	620	630	640	650	660
CTTCATCGCG ACGTGCTTCC GCACGCCGC GTTCAACGAT GTTCCACGAC AAAGGAGTTG					

CAGGTTTCC



Bases 1-1287 of SEQ ID NO:2

Fig.4

GATCTTCCGG GACATCTGAG GCGCCGGAGG CGATCCGAGG CGCCCGAGGC GTCTGCCGGA 60
 AGGGCGCCGC CGTGCCGTCC ATCCCCGTCC CGGTCGACGC GGGCCGGGAG GGGGTGCCGC 120
 GGGCCCTTC GGCTGTGTGG ACGAAGCGTC GGGTCGGAGG GCGGCCGGA TATCGTCCTT 180
 GGGGCGGGGT GGCCGAATT GCCGCCATGG TGTGCGCGG GAATCGACCC GAAGACATGA 240
 TCACTTCTCG TATCCACCCG ATCACGTATC CGGGAGTCGA GAAGTGTTAC GCCGTGCCCC 300
 TGTCGGCGTC CTCACCCCTG TCGCCGTGAC AGCGACCCGC GTTCTTCCAC TCGCACGGAC 360
 GGCCCCACAG GACCTTTCGG CCGGGGCTCG CCGCGCCGCC TCGGTGACGG CCTCCGAATA 420
 ACGCGGCGGC CGGGGCTCG GCCGGTTGAC CGATCCGGGT CACGCGCCCC GCCGGGCGGG 480
 CGGCCACGTC CGGTCTCGCC CCGCCCGACA TCGGCTCGGA CTGCCTTCGC TCGCACTTCT 540
 TCCCGCCTCC CGGCGCGGTT TTTCGCGCGC CGAAGGTGCG GCGACGCGTA CCGAATCCCC 600
 CTTCATCGCG ACGTGCTTCC GCACGGCCGC GTTCAACGAT GTTCCACGAC AAAGGAGTTG 660
 CAGGTTTCC ATG CGC ATA CGC CGG AGA GCT CTC GTC TTC GCC ACT ATG AGT
 Met Arg Ile Arg Arg Arg Ala Leu Val Phe Ala Thr Met Ser>
 1 5 10

720
 GCG GTG TTA TGC ACC GCC GGA TTC ATG CCG TCG GCC GGC GAG GCC GCC
 Ala Val Leu Cys Thr Ala Gly Phe Met Pro Ser Ala Gly Glu Ala Ala>

780
 GCC GAC AAT GGC GCG GGG GAA GAG ACG AAG TCC TAC GCC GAA ACC TAC
 Ala Asp Asn Gly Ala Gly Glu Glu Thr Lys Ser Tyr Ala Glu Thr Tyr>

840
 CGC CTC ACG GCG GAT GAC GTC GCG AAC ATC AAC GCG CTC AAC GAA AGC
 Arg Leu Thr Ala Asp Asp Val Ala Asn Ile Asn Ala Leu Asn Glu Ser>

900
 GCT CCG GCC GCT TCG AGC GCC GGC CCG TCG TTC CGG GCC CCC GAC TCC
 Ala Pro Ala Ala Ser Ser Ala Gly Pro Ser Phe Arg Ala Pro Asp Ser>

GAC GAC AGG GTC ACC CCT CCC GCC GAG CCG CTC GAC AGG ATG CCC GAC
 Asp Asp Arg Val Thr Pro Pro Ala Glu Pro Leu Asp Arg Met Pro Asp>

960
 CCG TAC CGT CCC TCG TAC GGC AGG GCC GAG ACG GTC GTC AAC AAC TAC
 Pro Tyr Arg Pro Ser Tyr Gly Arg Ala Glu Thr Val Val Asn Asn Tyr>

1020
 ATA CGC AAG TGG CAG CAG GTC TAC AGC CAC CGC GAC GGC AGG AAG CAG
 Ile Arg Lys Trp Gln Gln Val Tyr Ser His Arg Asp Gly Arg Lys Gln>

1080
 CAG ATG ACC GAG GAG CAG CGG GAG TGG CTG TCC TAC GGC TGC GTC GGT
 Gln Met Thr Glu Glu Gln Arg Glu Trp Leu Ser Tyr Gly Cys Val Gly>

1140
 GTC ACC TGG GTC AAT TCG GGT CAG TAC CCG ACG AAC AGA CTG GCC TTC
 Val Thr Trp Val Asn Ser Gly Gln Tyr Pro Thr Asn Arg Leu Ala Phe>

GCG TCC TTC GAC GAG GAC AGG TTC AAG AAC GAG CTG AAG AAC GGC AGG
 Ala Ser Phe Asp Glu Asp Arg Phe Lys Asn Glu Leu Lys Asn Gly Arg>

1200
 CCC CGG TCC GGC GAG ACG CGG GCG GAG TTC GAG GGC CGC GTC CCG AAG
 Pro Arg Ser Gly Glu Thr Arg Ala Glu Phe Glu Gly Arg Val Ala Lys>

1260
 GAG AGC TTC GAC GAG GAG AAG GGC TTC CAG CGG GCG CGT GAG GTG GCG
 Glu Ser Phe Asp Glu Glu Lys Gly Phe Gln Arg Ala Arg Glu Val Ala>



Fig.5

Bases 1288-2393 of SEQ ID NO: 2

1320
 TCC GTC ATG AAC AGG GCC CTG GAG AAC GCC CAC GAC GAG AGC GCT TAC
 Ser Val Met Asn Arg Ala Leu Glu Asn Ala His Asp Glu Ser Ala Tyr>

1380
 CTC GAC AAC CTC AAG AAG GAA CTG GCG AAC GGC AAC GAC GCC CTG CGC
 Leu Asp Asn Leu Lys Lys Glu Leu Ala Asn Gly Asn Asp Ala Leu Arg>

AAC GAG GAC GCC CGT TCC CCG TTC TAC TCG GCG CTG CGG AAC ACG CCG
 Asn Glu Asp Ala Arg Ser Pro Phe Tyr Ser Ala Leu Arg Asn Thr Pro>

1440
 TCC TTC AAG GAG CGG AAC GGA GGC AAT CAC GAC CCG TCC AGG ATG AAG
 Ser Phe Lys Glu Arg Asn Gly Gly Asn His Asp Pro Ser Arg Met Lys>

1500
 GCC GTC ATC TAC TCG AAG CAC TTC TGG AGC GGC CAG GAC CGG TCG AGT
 Ala Val Ile Tyr Ser Lys His Phe Trp Ser Gly Gln Asp Arg Ser Ser>

1560
 TCG GCC GAC AAG AGG AAG TAC GGC GAC CCG GAC GCC TTC CGC CCC GCC
 Ser Ala Asp Lys Arg Lys Tyr Gly Asp Pro Asp Ala Phe Arg Pro Ala>

1620
 CCG GGC ACC GGC CTG GTC GAC ATG TCG AGG GAC AGG AAC ATT CCG CGC
 Pro Gly Thr Gly Leu Val Asp Met Ser Arg Asp Arg Asn Ile Pro Arg>

AGC CCC ACC AGC CCC GGT GAG GGA TTC GTC AAT TTC GAC TAC GGC TGG
 Ser Pro Thr Ser Pro Gly Glu Gly Phe Val Asn Phe Asp Tyr Gly Trp>

1680
 TTC GGC GCC CAG ACG GAA GCG GAC GCC GAC AAG ACC GTC TGG ACC CAC
 Phe Gly Ala Gln Thr Glu Ala Asp Ala Asp Lys Thr Val Trp Thr His>

1740
 GGA AAT CAC TAT CAC GCG CCC AAT GGC AGC CTG GGT GCC ATG CAT GTC
 Gly Asn His Tyr His Ala Pro Asn Gly Ser Leu Gly Ala Met His Val>

1800
 TAC GAG AGC AAG TTC CGC AAC TGG TCC GAG GGT TAC TCG GAC TTC GAC
 Tyr Glu Ser Lys Phe Arg Asn Trp Ser Glu Gly Tyr Ser Asp Phe Asp>

1860
 CGC GGA GCC TAT GTG ATC ACC TTC ATC CCC AAG AGC TGG AAC ACC GCC
 Arg Gly Ala Tyr Val Ile Thr Phe Ile Pro Lys Ser Trp Asn Thr Ala>

CCC GAC AAG GTA AAG CAG GGC TGG CCG TGA TGTGAGC GGGGTGGAGG
 Pro Asp Lys Val Lys Gln Gly Trp Pro ***>

1920
 GGAGCCGGTT GCCCGGCTCC CCTCCACCCT CTCCCCGCC ACCACGAAAG TCGCTACAGC

1980
 TCGTGTCCCG TCGTGCTGTC GACGTGCCGC GGGAGTTCCG CCTCGTGGCG GTCGCCCGTC

2040
 GTCGGGGTGC CCGTGGGTTT GAACATGAGG ATGGAGGCGC CCGGGGAGGA CGGCTTGTGT

2100
 TCGGTGCCCT TGGGCACCAC GAAGGTGTGC CCCTTGTGCA GGCGCACCGT GTGTTCCGTT

2160
 CCGTCGGAGT CGCGGAGCGC CACGTCAAG CGGCCGTCCA GGACGAGGAA GAACTCGTCG

2220
 GTGTCCTCGT GGACGTGCCA GACGTGCTCG CCTCGGGTGT GGGCGACGCG GACGTCGTAG

2280
 TCGTTCATGC GGGCGACGAT GCGCGGGCTG TAGACGTCGT CGAAGGAGGC GAGGGCCTTG

2340
 GCGAGGTTGA CGGGCTCGGT GTCGTTTCATG GTCCGAGTCT CGGCGGGAGC CCGCCGCGGC

GTC